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In many areas where two language groups live side by side large numbers in both groups tend to resist becoming adept in the other language despite every opportunity to do so. One possible reason for the resistance to bilingualism might be the belief held by many that bilingualism and intelligence have a negative correlation. Until recently, research supported the conclusion that themastery of two languages was mentally confusing and that this confusion resulted in an "intellectual deficit."

A recent study in Montreal, however, reached different conclusions. The McGill University study compared two groups - one monolingual and one bilingual - of 10 year old children from six French schools. The groups were matched by socio-economic class, sex, and age. They were subjected to a wide variety of intelligence tests as well as several measures of attitude. The bilingual children appeared markedly superior in both verbal and non-verbal intelligence. The bilinguals presented a greater mental flexibility, a superiority in abstract concept formation, and a more diversified set of mental abilities than did their monolingual classmates. The bilingual children also evidenced a more friendly attitude toward the people whose language they had learned.

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Staffing African Universities

THERE is probably not a country in Africa today that does not have an ambitious ten- or twenty-year plan for economic and social development. The essential ingredient needed for the success of all these programs is manpower: manpower conceived of not merely as warm bodies but as educated minds.

Consequently the African nations are making extraordinary efforts and painful sacrifices to multiply many times their current educational facilities, to teach all of their children at least to read and write, to send increasing numbers of them on through secondary school, and to send the brightest of those into universities from whence they may emerge as the political, economic, and technological leaders of their countries. Large proportions of Africa's all too meager financial resources are being poured into this effort.

Doctors, engineers, managers, agricultural experts are needed *now*. This means that although education in every country of Africa needs strengthening at every level, priority must be given to the rapid production of more university graduates. Thus existing universities are being enlarged; new ones are being created. And one overwhelming shortage will soon confront them all: staff.

The question of where teachers will be found during this period of rapid expansion of higher education presents a problem to the young African universities and a challenge to the established universities, particularly those of the English-speaking world. This is the message of a quietly eloquent document prepared by Sir Alexander Carr-Saunders, former director of the London School of Economics and an authority in the field of talented manpower. Under a Carnegie grant, Sir Alexander directed a study on the staffing of African universities to be used at a UNESCO conference on the development of higher education in Africa. The meeting was held in Tananarive in September of last year. Sir Alexander has now prepared a short summary of that report, available in this country from the American Council on Education.*

Most of the Carr-Saunders report is concerned with Middle Africa, and at this point you had better refer to a map of the continent, for what Sir Alexander

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* The summary, *Staffing African Universities*, will be available May 15, free of charge, from the American Council on Education Publications Division, 1785 Massachusetts Avenue, N.W., Washington 6, D. C.

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and UNESCO call "Middle Africa" is actually *most* of Africa—to be specific, all except Egypt, Libya, Tunisia, Algeria, and Morocco in the north, and the Portuguese territories and the Republic of South Africa in the south.

In that vast area of Middle Africa, during the academic year that began in 1960 there were approximately 31,000 students enrolled in 19 universities. They were taught by 2,166 professors, of whom 27 per cent were locally born and 73 per cent were from overseas. Most of these "expatriate" teachers came from a small number of countries: Great Britain, France, Belgium, and the United States, in that order.

According to current estimates and plans, by 1980 there should be about 274,000 students enrolled in 32 universities. The number of teachers required then will be almost 8,500, or roughly four times the present number. If all goes according to plan, however, almost 100 per cent of the university staffs by 1980 will be African.

The Immediate Need

The problem is immediate. Assuming an average five-year tenure per teacher, the African universities between now and 1966 must somehow recruit 3,000 expatriate staff members; they must enlist 2,500 expatriates between 1966 and 1971; 1,000 between 1971 and 1976; and 400 from then until 1980. The total, then, is nearly 7,000 over an 18-year period. And the great majority—about 5,500—must be English-speaking.

The challenge thus posed to the universities of Britain and North America is unmistakable—and it is made the greater by the fact that enrollments there too are expected to rise dramatically, creating a shortage of qualified university instructors for the home campuses. Having stated this problem, Sir Alexander writes drily: "No more need be said about this because nothing can be done about it. We must now discuss the problems which arise in the recruitment of expatriate teachers irrespective of the number available."

The first problem is one of simple communication. If, say, the University College, Dar-es-Salaam, has openings for professors, how is it to make its needs known to the hundreds or even thousands of potential suppliers throughout the English-speaking world? And as it begins to attract a few applicants, through advertising or word-of-mouth, how is it to assess their qualifications (which, under such a hit-and-miss system, may be none too good)?

What is needed in each of the major English-speaking countries, Sir Alexander makes clear, is some form of national body representing the academic community of that country. Such an agency must be of high standing and thus command the confidence of the home universities and colleges. It would spread information about African universities. It would inform a potential applicant for an overseas assignment about what he might expect in the range of work, opportunities for research, conditions of living, and so on. The agency could make active attempts to recruit teachers, and interview candidates and report its views to the African university requesting them. In short, both potential candidates for overseas teaching and the universities requesting them would have reliable help from an agency they all trusted.

Even when channels of communication have been opened many other problems remain, and these can be solved only by alterations in the attitudes of individuals and, more importantly, changes in the practices of institutions. Questions of security and future advancement trouble both junior and senior potential recruits. A young graduate, for example, might very much like an overseas assignment, but he naturally wants to return home for the major part of his career. (Actually, since it is desirable and also inevitable that the African universities' staffs will ultimately be almost completely "Africanized," few non-Africans should plan lifetime careers there anyway.) The new graduate fears, however, that he will be out of sight, out of mind of his colleagues and home university. At the other end, a senior man seldom wants to resign his permanent appointment at home to take an overseas offer.

What is needed here—and this is where the practices of institutions come in—is a system whereby both junior and senior staff could be loaned, or seconded, to African universities for a stated period without suffering loss of status or advancement at home. As far as junior staff goes, an existing arrangement between one British university and an African university could be copied with advantage by other institutions. On the recommendation of a joint committee representing both institutions, a young graduate is appointed for five years to a post at the British university; he is immediately seconded to the African university, in which he serves for four years; his fifth year is spent at the British university. During this year he completes such research as he is doing and looks for a post at home.

Senior staff, however, is what the African universities most need, since increasing numbers of African graduates are becoming available for the junior posts. Obviously few professors are willing to surrender tenure at home to accept a limited assignment overseas. In these cases, too, a policy of secondment must be instituted—one which not merely allows for a leave of absence but ensures that the professor will be reinstated with the status and salary he would have had if he had not been away. The catch here is that, as the Carr-Saunders report makes clear, most appointments should be for a period of at least five years.

"The essential need of any university is a teaching staff who will carry

the full burden of the duties, teaching and administrative, attaching to their offices, and who have a sufficient knowledge of the university and its surroundings to enable them to play their part in formulating improvements in the program and laying down long-term plans. They must be committed to the service of the university and have no other loyalty."

Sir Alexander is well aware of how difficult it is for most universities to spare senior men for as long as five years. In part, though, as he points out, the difficulty comes about because universities have not hitherto been asked to consider such arrangements, and "it is always difficult to see how something can be done for the first time. If the difficulties are faced, they may be found to be less formidable than now appears to be the case; there are excellent reasons for asking the universities to face them having in mind the great benefits which they could confer on African universities if they overcame them." We add that these institutions might bear in mind also the great benefits which would accrue to themselves and their students in the return of men who had been both seasoned and invigorated by challenging foreign assignments.

Provision must also be made to allow individuals serving overseas to retain their pension rights, insurance, and other benefits. As far as remuneration goes, Sir Alexander suggests that African and expatriate teachers of comparable grade should receive the same spendable income, but that there are grounds for providing special allowances (for children's education, home leave, etc.) for expatriates. He suggests also that in cases where the instructor would be receiving a much larger salary if he remained at home to teach, the difference between that sum and what he makes overseas should be paid to him at the end of his tour. This would have the advantage of allowing Africans and expatriates to enjoy the same living standards, while the expatriate would not suffer an overall loss in income.

Treading New Paths

"It is not enough to make the path smooth for those who go overseas; they must want to tread it." Sir Alexander remarks on "how awakening and stimulating an experience it can be to work in an African university. Old problems take new shapes, and novel problems present themselves; it is necessary to examine beliefs and practices afresh. Only a dull person could fail to learn much of value."

Opportunities for research are immense; facilities are better than most Westerners believe them to be; library holdings are impressive. And, to get down to other practical matters, housing is adequate and health no longer presents the problems it once did. "In brief, those who think of service in an African university have no reason to apprehend material discomfort."

Finally, Sir Alexander makes the point that although universities were established in Middle Africa largely by overseas initiative, they are now well rooted and are "among the foremost possessions of new national states which repose in them much of their hopes for the future." They are now in the hands of the Africans, as they should be. The best contribution overseas countries can make is "to respond to the needs of African universities as they express them." The greatest of their expressed needs is for teachers from overseas, during this short but critical period, to help them grow in both size and distinction.

This need is an African appeal to the universities of the world. It cannot go unanswered.

Training Teachers for Africa

ALL levels of education in Africa are dependent upon one another, as they are everywhere in the world. It is impossible to strengthen university education if the students sent on by the secondary schools are ill prepared. And it is obviously impossible even to expand the enrollments of the universities if the secondary schools do not produce enough graduates.

A shortage of secondary schools is one of Africa's gravest educational problems, and at its heart—quite overshadowing even the lack of money and physical facilities—is a dearth of qualified teachers. Great efforts are being made to supply foreign teachers on an interim basis; both the Peace Corps and the Agency for International Development, to name only two American agencies, are supplying hundreds at this very moment. But these represent merely *ad hoc* measures; the essential long-term need is for a strengthening of African teacher education.

Such strengthening is the goal of a major cooperative effort launched almost three years ago with the aid of a Carnegie grant. Dubbed the Afro-Anglo-American Program in Teacher Education and generally referred to as the A-A-A, it involves ten institutions: Teachers College, Columbia University; the Institute of Education, University of London; and the institute or department of education in Pius XII College (Basutoland), University of Ghana, Ahmadu Bello University (Nigeria), University of Ibadan (Nigeria), University of Nigeria, University College of Rhodesia and Nyasaland, University College of Sierra Leone,

and Makerere University College (Uganda).

The basic idea was simply that it should be possible for an international group of universities, all deeply concerned with African educational problems, to work together in developing solutions to those problems. The solutions must be truly African; yet it appeared reasonable to assume that some practices which had proved valuable elsewhere would prove adaptable to meeting special African needs. This provided the rationale for involving British and American institutions. In the United States it meant pulling together and developing resources at Teachers College, where there was already interest in African education.

The Director of the A-A-A program is Teachers College professor Karl W. Bigelow, whose knowledge of African problems in developing teacher education is based on more than ten years' experience. He has seen Africa's challenge at firsthand and has devoted his energy and leadership to enlisting American help for African education.

The A-A-A program is based on quality rather than numbers. A small training program for Americans prepares them for educational service in Africa. So far seven have completed a year's work—divided into one-half at T. C., the other half at London—and are established in posts in Africa. Ten are midway in this year's program, and it is expected that, upon completion of their training, at least half of them will go directly to African teachers colleges.

The emphasis on teacher-training institutions is deliberate, for it is believed that the A-A-A program can make its greatest contribution through producing staff members for such institutions rather than secondary schools. In line with this belief, there is a training program for Africans who either already are, or are being groomed to be, staff members of teacher-training institutions. Eight African fellows have participated in a year's postgraduate study at T. C.

An informal exchange program among all the participating institutions sends staff members from one to another for lectures, teaching, and consultation. In addition, meetings on teacher education are held in Africa with representatives from African, British, and American educational institutions as well as international organizations.

One of the most important by-products of the program has been the impact on T. C. and what it has enabled that institution to accomplish for Africa quite apart from the A-A-A program itself. When it was launched, only two faculty members had had on-the-spot experience in Africa; that number has been increased to ten. Even those faculty members who have not been abroad, however, have been influenced by the visits from staff members of cooperating African and British institutions as well as by the experiences of their own colleagues. Professor Bigelow claims flatly that "there is no enterprise for which Teachers College has received special support which has affected so large a proportion of its professional and administrative staff, and which has been responded to with such enthusiasm."

At the time the A-A-A was proposed it was the first plan ever put forward to provide special preparations for Americans en route to teaching service in Africa. Before it could actually get off the ground two far more massive operations were begun—and because of A-A-A, Teachers College was asked to take a significant share of the responsibility for each, and possessed unique resources with which to do so. The first operation was the AID-sponsored Teachers for East Africa program, for which T. C. has already selected and trained nearly 300 young Americans now teaching in secondary schools in Kenya, Tanganyika, Uganda, and Zanzibar. And T. C. has prepared two groups of Peace Corps volunteers for service in Africa—one in Sierra Leone, one in Nigeria.

To meet these demands on its resources, Teachers College has established a permanent Institute for Education in Africa. This also is headed by Mr. Bigelow.

To sum up, in the two and a half years since A-A-A was established, Teachers College has selected 289 Americans for teaching service in Africa; it has trained, in whole or in part, not only these, but an additional 120—a total of 409. Of these, almost all are now teaching in West, East, and Central Africa.

Themes, Theories, and Therapy

ALMOST every freshman in almost every American college and university is required to take a year-long course in English composition. This course, by whatever of many names it is called, is by far the most heavily populated offering in the entire curriculum.

Two major arguments are made to justify the preemption by the English department of from one-fourth to one-fifth of every freshman's academic schedule. The first is a practical argument, based on a "service" concept of the course—that its purpose is to remedy assumed (and usually all too obvious) deficiencies in most students' ability to write their native language correctly, let alone with fluency, grace, and appropriate force.

The other argument, says Albert R. Kitzhaber in *Themes, Theories, and Therapy: The Teaching of Writing in College*,* "is not practical but liberal." It assumes that "the primary purpose of the course is to focus the student's attention on fundamental principles of clear thinking and the clear and effective expression of that thinking and to give him disciplined practice in applying the principles." All college courses should foster this kind of intellectual discipline; the only difference between them and freshman English is that in the case of English "the principles of logic and rhetoric and their successful application are at the center of attention, the primary concern of the course."

Given the quality of much student writing today, many professors would be happy to settle for mere grammatical correctness: sentences that contain both a subject and a verb and, as a sort of bonus, agreement in number between the two. But when good writing is thought of as what it actually is—the clear expression of clear thinking—it becomes obvious that there is no short cut to writing skill. As Mr. Kitzhaber says, "There can be no quick and painless way to develop a well-stocked mind, a disciplined intelligence, and a discriminating taste in language and fluency in its use. . . . The habit of good writing, like the habit of ethical conduct, is of slow growth; it is an aspect of a person's general intellectual development and cannot be greatly hastened apart from that development."

This is not to say that writing instruction cannot be improved; in fact, the theme of Mr. Kitzhaber's book is that improvements are necessary and, although difficult to make, possible. Under a Carnegie grant to Dartmouth College, Mr. Kitzhaber, now professor of English and director of the Curriculum Study Center at the University of Oregon, was invited to make a survey of the present state of freshman composition and a group of recommendations for improving its teaching. He analyzed the syllabuses for freshman English courses at 95 public and private four-year institutions: universities, state colleges, teachers colleges, coeducational liberal arts colleges, non-coed liberal arts colleges, and a few technical institutes. In addition, he visited 18 of the institutions.

As they are now constituted, Mr. Kitzhaber says, most freshman courses exhibit three main weaknesses: confusion in purpose, content, and organization; inexpert teaching; and poor textbooks. These criticisms pretty well cover the waterfront, since there are few important aspects of a course apart from what is taught, how it is taught, and the books used to teach it.

Although in general terms the principal aim of freshman English is said to be the improvement of the student's ability to read and write, "most of the confusion in freshman English stems from differing notions of how writing ought to be taught. The most diverse content may be dumped into the course on the grounds that it will help the student learn to write better."

Mr. Kitzhaber cites no fewer than ten categories upon any one of which, or innumerable combinations of them, courses are based. These include traditional grammar of the type students have had since the seventh grade; structural linguistics; literature, organized in any of a large number of ways; rhetoric of various kinds; logic; semantics "of various kinds, and according to various prophets"; the communication process and the mass media; public speaking; propaganda analysis; and "a kind of watered-down social science survey based on collections of essays drawn for the most part from current magazines."

Mr. Kitzhaber discerns little clear progression in the freshman English course. The second semester is likely to be either a totally different course from the first—say a course in lyric poetry—or else an almost exact repetition of the first semester. In many cases, students are asked to write papers on such challenging themes as "A Happy Vacation" or "My Most Embarrassing Moment." It would seem that the wise youngster would save his ninth grade papers for later use.

The quality of teaching is often low, for three major reasons. In large universities, the freshman course is commonly assigned to graduate students, who teach part time while working toward an advanced degree, and/or to junior instructors newly out of graduate school.

"Some of these teachers are enthusiastic, experienced, expert; more are bored or resentful, and are ill informed on what they are supposed to teach, particularly language and composition."

The low status given the freshman

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* New York: McGraw-Hill Book Company, Inc., May 1963. Hard cover, $4.95; paperback, $2.45.

course on many campuses also affects the teaching. "Most English departments have regarded it as a kind of therapy which they perform without enthusiasm, and they have made it into a narrowly practical how-to-do-it course with few, if any, intellectual pretensions." For this and other reasons, "the best minds in the profession have rarely concerned themselves with it or its problems."

But the primary reason for the poor teaching is less the result of inexperience and indifference than of inadequate professional preparation. Mr. Kitzhaber blames the English departments which give the teachers their undergraduate and graduate education.

"Preoccupied with the study of literature, English departments seldom require the future English teacher—high school or college—to take courses that would give him a genuine professional competence in teaching either language or composition." Thus most instructors concentrate on literature, which they know and love, with the result that "literature drives out less glamorous subject matter, and composition is either forgotten or taught incidentally and grudgingly. The principles of good writing may surely be deduced from examples of the best writing, but most English teachers find it more exciting to trace symbols and identify archetypal patterns than to make a systematic rhetorical analysis of an essay to reveal its structure."

Freshman textbooks in many fields could stand improving, Mr. Kitzhaber notes, but he finds that those for English are, "as a class, likely to be among the poorest, the least scholarly, that the student will encounter." This is particularly true of the handbooks and the books of readings.

"Most handbooks are deficient both in their view of language and in their theory of rhetoric." Few books present even the smallest part of the new knowledge about language that has revolutionized the study of it in the

last several decades. As for rhetoric, "the majority of handbooks present a desiccated rhetorical doctrine that has probably done a good deal more over the years to hinder good writing than to foster it."

About the books of readings, a phenomenon peculiar to freshman English, the less said the better. Although "some of these books have been put together with intelligence and care . . . the overwhelming majority of them are cut-and-paste affairs that can ill sustain a course of true college grade."

Since *Themes, Theories, and Therapy* is a full-length book, it is impossible here even to touch on many of the subjects Mr. Kitzhaber covers—remedial courses, for example, and provisions now being made for superior students. A chapter on trends in freshman English includes an interesting section on "the new grammar"—structural linguistics. An entire chapter of the book is devoted to English composition at Dartmouth. Elsewhere, Mr. Kitzhaber observes that, although the colleges have assailed the high schools for giving poor preparation in English, more and better reforms are under way at the secondary level than at the collegiate.

Even his recommendations, which number 21, are too long to cover and too important to abbreviate here. Some of those dealing with the curriculum, however, are worth singling out. Mr. Kitzhaber calls first for dropping elementary instruction in grammar, usage, and mechanics, which is "not a proper activity for college classrooms." With "bonehead" English thus disposed of (to a non-credit course if absolutely necessary), the freshman English course should devote "approximately equal attention to logic, language, and rhetoric, probably in that order, with constant practice in writing." Ideally, two years of English would be required, with the sophomore year devoted to literature.

Where only one year of English is required, as is usually the case, "logic and rhetoric (and possibly some language study) should make up half the course, literature the other half." And the writing that is done in the part of the course devoted to literature should be "analysis and criticism of the literary works being studied."

Even a full year of college composition well taught cannot, of course, ensure that students will write well. And many freshmen who turn creditable prose in to their freshman English professors turn in no such thing later on. Therefore "a steady pressure to write well must be exerted on college students throughout their undergraduate years." This pressure must be applied by teachers of other subjects, who are often unwilling to apply it. And those few who are willing are often unable. Many are hypersensitive to supposed misusages of "shall" and "will" and totally insensitive to paragraphs which, while grammatically "correct," are nearly unintelligible.

This brings us to two points that recur throughout Mr. Kitzhaber's book. One is that we must do away with the prevalent notion that merely *correct* writing is necessarily *good* writing. Nothing could be farther from the truth. The other is that "Poor writing should be penalized just as poor thinking is penalized; in most subjects the two are indistinguishable."

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Intelligence

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The Intelligent Bilingual

Most of us monolingual Americans would be only too glad to be bilingual. Curiously, however, in many areas where two language groups live side by side, large numbers in both groups are resistant to becoming equally facile in the other language despite every reason, and opportunity, to do so.

There are probably several reasons for this. And it is possible that some of the resistance to becoming truly bilingual has been reinforced by a belief that bilingualism and intelligence have a somewhat negative correlation.

Until recently, this belief appeared to be supported by research, for most studies done on the relation of bilingualism and intelligence reported that the bilingual person pays a price for his bilingualism in the form of an "intellectual deficit." In short, these studies seemed to establish that monolingual persons do better on intelligence tests than bilingual persons. The general conclusion drawn was that the mastery of two languages was mentally confusing, and that this confusion was reflected in measures of intelligence.

A recent study in Montreal, however, showed that bilingual children are markedly *superior* in both verbal and non-verbal intelligence to monolinguals. The research was done by associate professor of psychology Wallace E. Lambert and his associate, Miss Elizabeth Peal, under a Carnegie grant to McGill University for studies of second-language learning and bilingualism.*

In analyzing the previous research, Mr. Lambert and Miss Peal were struck by what seemed to be two important failures in control. They believed that in most cases not enough attention had been paid to ensuring that the two groups being compared were from the same socio-economic background, thus having roughly equal opportunities for intellectual challenge. And they believed that it was not established that the two groups actually included true bilinguals on the one hand and true monolinguals on the other.

The McGill study compared two groups—one truly monolingual, one truly bilingual—of 10-year-old children drawn from six French schools in Montreal. The groups were matched on socio-economic class, sex, and age. They were subjected to a wide variety of tests of different types of intelligence. In addition, several measures of attitude were used, on the assumption that the attitude of the monolinguals toward the other language group would be less favorable than those of the bilinguals.

This was the only assumption that was supported by the results. The bilingual children did reveal much more favorable attitudes toward the English community than did the monolinguals. But the expectation, based on previous findings, that the bilinguals would do less well on intelligence tests was proved wrong. The bilinguals did significantly better on every measure of verbal and non-verbal intelligence.

The old chicken and egg problem immediately comes to mind. Does the bilingual child learn the second language because he is more intelligent, or does the knowing of two languages help his intellectual development? Mr. Lambert and Miss Peal do not presume to answer this question, but they suggest that future research might profit from a shift of emphasis. Instead of looking for favorable or unfavorable effects of bilingualism on intelligence, it might inquire into the basic nature of these effects. This is the major emphasis in Miss Peal's current research.

They do put forward several hypotheses. One is that bilinguals, because of their training in two languages, become more adept at concept formation and abstract thinking. People who learn to use two languages have two symbols for every object, and may thus be forced to conceptualize—to see things in terms of their general properties without relying on the mere words that designate them.

Another hypothesis is that bilinguals may develop more flexibility in thinking. They generally switch from one language to another, sometimes trying to solve a problem while thinking in one language and then, when blocked, switching to the other. This habit might make them, in thinking as a whole, more prone to drop one hypothesis or concept and try another. Monolinguals might be more rigid in this respect.

Whatever the reasons, the bilingual children studied in Montreal appear to have greater mental flexibility, a superiority in concept formation, and a more diversified set of mental abilities than do their monolingual classmates. They also, it must be remembered, have a more friendly attitude toward the people whose language they have learned as well as their own.

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* "The Relation of Bilingualism to Intelligence," by Peal and Lambert. *Psychological Monographs: General and Applied*, No. 546, Vol. 76, No. 27, 1962 (American Psychological Association, 1333 16th Street, N. W., Washington, D. C.).

New Staff Member

ARTHUR L. SINGER, JR., will join the Carnegie Corporation staff in June as an executive associate. He received the A.B. degree in economics from Williams College and the M.B.A. degree from the University of Michigan. He served in the Navy from 1952 to 1955. For the past eight years Mr. Singer has been at the Massachusetts Institute of Technology where he was administrative officer, Center of International Studies, until his appointment in 1959 as assistant dean, School of Humanities and Social Science. In 1961 he also became assistant dean, School of Industrial Management.

New Grants

GRANTS amounting to $7,529,000 were voted during the first half of the fiscal year 1962–63, which began October 1, 1962.

The income for the fiscal year 1962–63, after deducting administrative expenses, is estimated at $10,870,000, of which $525,000 has been set aside to meet commitments incurred in previous years. It is the Corporation's policy to spend all income during the year in which it is received.

Included among the grants voted during the past six months are those listed below:

United States

Alumnae Advisory Center, Inc.: survey of part-time job opportunities for college-trained women, $17,000.

The American Assembly: Assembly on the United States and Canada, $90,000.

American Institute of Certified Public Accountants: study of professional education for certified public accountants, $50,000.

The Association of the Bar of the City of New York Fund, Inc.: study of modern surveillance technology, $34,500.

Committee on Institutional Cooperation of the Council of Ten and the University of Chicago: support of special projects, $100,000.

Council for the Advancement of Science Writing, Inc.: on-the-job training for science reporters, $36,000.

Institute of International Education: consultative service on overseas programs for American undergraduates, $45,000.

University of Maryland: study of agricultural education in the United States, $200,000.

University of Michigan: study of the factors which influence economic behavior, $180,000.

North Carolina State Board of Education: support of a summer school for gifted high school students, $225,000.

Purdue University: experiment in teaching economics in elementary schools, $99,000.

Social Science Research Council: research and conferences on international organizations, $300,000.

University of Southern California: support of a Chinese and Japanese language program for secondary schools, $180,000.

Stanford University: automated laboratory for research on learning and teaching, $1,050,000.

Thayer Academy: program in the teaching of Japanese at the secondary school level, $45,000.

Commonwealth

Canadian Universities Foundation: study of the international role of Canadian universities, $30,000.

University of Ibadan: liaison between the Institute of Education and teachers colleges, $54,000.

Inter-University Council for Higher Education Overseas: planning for a new university college in Basutoland, $17,000.

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Helen Rowan, *Editor*

Each issue of the Quarterly describes only a few of many Carnegie-supported projects in a variety of fields. Full listings of all the Corporation's activities are contained in its annual reports, which usually are published in January.

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The Corporation is primarily interested in higher education and in certain aspects of public and international affairs. Grants are made to colleges and universities, professional associations, and other educational organizations for specific programs. In higher education, these include basic research, studies of educational developments, training opportunities for teachers and administrators, and other educational projects of an experimental nature. In public and international affairs, the Corporation is concerned primarily with research and training programs which promise increased understanding of the problems the nation faces and which provide better selection and training of young men and women who must deal with these problems.

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